

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 36 Suppl. No. 1 Contract No. 04 - 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Adjustment of Compensation at Lump Sum:

Modify Tower base plate and anchor rod grouting including, but not limited to, the following:

- 1) Provide grout tight seal and fill oversized dowel holes with 104 MPa epoxy grout
- 2) Provide a grout tight seal around the anchor bolt pipe sleeves
- 3) Revise high strength grouting specifications
- 4) Increase grout pad thickness under Tower skirt base plate
- 5) Remove plastic alignment bolts
- 6) Provide a spare 120 mm plate
- 7) Additional work to perform Tower base plate grout mock-up to simulate the sleeves and seals between the base plate and T1 foundation

Revise Special Provisions Section 10-1.56, "HIGH STRENGTH NONSHRINK GROUT," subsection "WORKING DRAWINGS," Item E as shown on sheet two (2) of this change order.

Revise Special Provisions Section 10-1.56, "HIGH STRENGTH NONSHRINK GROUT," subsection "MATERIALS," first and third paragraphs as shown on sheet two (2) of this change order.

The following revised and supplemental plan sheets detail the changes addressed in this change order: 598R3, 598S1, 599R3, 600R2, and 604R1 (of 1204) as shown on sheets 3 through 7 of this change order.

This change order resolves the costs associated with Contractor Request For Information (RFI) numbers 34R0, 34R1, 34R2, 34R3, 653R1, 966R0, 966R2, 966R4, 973R1, 1071, and 1129 with respect to changes listed above.

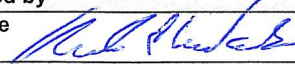
For this work, the Contractor will receive a lump sum price of \$204,949.00. This sum constitutes full and complete compensation for furnishing all labor, material, tools and incidentals including all markups by reason of this change.

Adjustment of Compensation at Lump Sum.....\$204,949.00

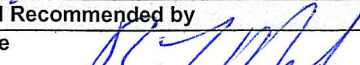
Estimated Cost: Increase ☒ Decrease ☐ \$204,949.00

By reason of this order the time of completion will be adjusted as follows: 0 days

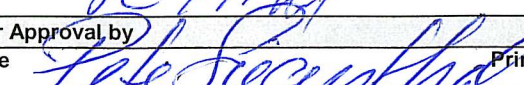
Submitted by

Signature 	Resident Engineer Mark Woods, Senior B.E.	Date <u>22 Sept 2010</u>
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Approval Recommended by

Signature 	Supervising Bridge Engineer Richard Morrow, Sup. B.E.	Date <u>9/22/10</u>
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Engineer Approval by

Signature 	Principal Transportation Engineer Peter Siegenthaler, Prin. T.E.	Date <u>9/30/10</u>
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We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature 	(Print name and title) Pieter Waast van Gulik, Deputy Project Director	Date <u>9/29/10</u>
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STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HC-5 (Rev. 5/93)

CONTRACT CHANGE ORDER NO. 36 SUPPL. NO. 1
ROAD 04-SF-80-13.2, 13.9 SHEET 2 OF 7 SHEETS
FEDERAL NO.(S) _____ CONTRACT NO.: 04-0120F4

SPECIAL PROVISIONS:

1. In the Special Provisions, Section 10-1.56, "HIGH STRENGTH NONSHRINK GROUT," subsection "WORKING DRAWINGS," Item E is revised as follows:

"E. High strength nonshrink grout mix design (mix design not required for proprietary pre-packaged high strength nonshrink grouts)."

2. In the Special Provisions, Section 10-1.56, " HIGH STRENGTH NONSHRINK GROUT," subsection "MATERIALS," the first paragraph is revised as follows:

"Grout shall be high strength, nonshrink grout and shall be a nonmetallic and non-gas-forming flowable or fluid grout containing natural aggregate, portland cement and additives and requiring only the addition of water. ~~Grout shall contain a minimum of 390 kg of cement per cubic meter.~~ Grout shall be pre-measured and prepackaged by the manufacturer, and shall be suitable for baseplate and foundation grouting. Aggregate shall show no segregation or settlement at fluid consistency at specified times or temperatures. One hour after mixing, the grout shall pass through a flow cone with continuous flow. Grout shall conform to the requirements of ASTM Designation: C1107, ~~Grade C~~ / C1107M-07a, and the following additional requirements:

Property	Requirement	Test
Shrinkage	0.0%	ASTM C827
Expansion	0.0%min., 4.0% max.	ASTM C827
Fluid Consistency (<u>fluid grout</u>)	20-30 seconds at 5°C to 38°C	CORPS-CRD-611-81 <u>ASTM C939</u>
<u>Flowable Consistency (flowable grout)</u>	<u>125-145% flow after 5 drops of the table in 3 seconds</u>	<u>ASTM C1437</u>
1 day compressive strength	24 MPa	ASTM C109
3 day compressive strength	35 MPa	ASTM C109
28 <u>56</u> day compressive strength	60 MPa	ASTM C109

3. In the Special Provisions, Section 10-1.56, " HIGH STRENGTH NONSHRINK GROUT," subsection "MATERIALS," the third paragraph is revised as follows:

"Grout shall be formulated for minimum initial set time of 4 hours and minimum final set time of 6 hours at 21 °C. Prior to use, the materials shall be stored in a cool, dry environment. Grout shall be free from chlorides and other corrosion-causing chemicals. ~~Grout shall be designed for an air content of 4 2 to 6 percent.~~"

